# Extreme to Exceptional Drought Continues Grip on Rio Grande Valley

## Little or No Relief Expected into early December

### Synopsis

Dry weather, above normal temperatures, and windy conditions continued to take a toll across the Rio Grande Valley by mid- November 2011. On November 9<sup>th</sup> and 10<sup>th</sup>, occasional light rain produced one quarter to one half inch in southern Cameron County; other locations had a tenth an inch or less. These rains never soaked into the soil, as breezy and very dry conditions erased any effects during the afternoon of the 10<sup>th</sup>.

Through November 18<sup>th</sup>, daytime highs have averaged near 80 degrees. However, there have been notable temperatures swings as fronts swept across the region more frequently. On many days, highs reached the middle 80s to lower 90s. Winds have been breezy to windy on most days; temporary breaks occurred just before each frontal passage and on single days when high pressure briefly covered the area.

According the latest United States Drought Outlook, the entire region remained under extreme (D3) to Exceptional (D4) Drought conditions. The Drought conditions continue to impact agriculture, including pastures and rangeland. Lack of rainfall - November may mark the 13<sup>th</sup> of 14 below average rainfall months - is adversely impacting hydrology.

#### Summary of impacts

Wildfire Danger: Extremely dry weather continues to provide an elevated risk of wildfire danger and rapid growth. Much of the Rio Grande Valley/Deep South Texas region is at exceptionally low "greenness" (cured fuels) and Fire Danger has ranged from Moderate to Very High, depending on observed humidity and winds. Fuel moisture, particularly for longer time lag fuels, has ranged from moderate to very dry. The latest Keetch-Byram Drought Indices (KBDI) are 600 to 700 over many areas, but highest in Hidalgo County (700 to 800). Burn bans are in effect for most, if not all, counties.

Check with your local emergency management or county office for the lates information and specific dates. Fire danger can change quickly from one day to another as winds and relative humidity values vary.

Agriculture: According to the USDA and Texas AgriLife Extension Service agents, persistent high winds coupled with hot temperatures in the 80s and 90s kept soil moisture levels short to very short. Rangeland and pasture conditions continued to deteriorate. Producers greatly increased supplemental feeding to keep cattle in fair body condition. In the Lower Valley, harvesting of citrus crops and vegetables was on going.

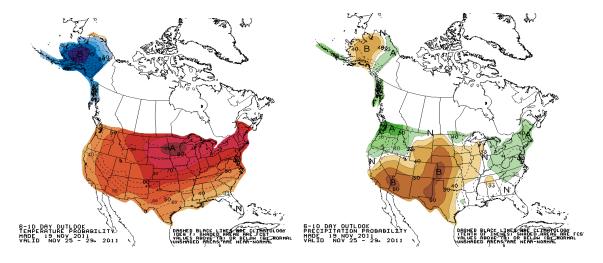
Water Restrictions: Voluntary water conservation continues for several public water entities to avoid shortages or further restrictions. A few entities have imposed mild restrictions. According to the State of Texas Commission on Environmental Quality (TCEQ), there are currently 2 communities in Cameron County, 8 in Hidalgo County, 4 in Starr County, 3 in Zapata county and 2 in Willacy county. Residents of the Rio Grande Valley are urged to conserve water.

## **Climate Summary**

The Rio Grande Valley/Deep South Texas region continues to experience much below average yearly rainfall and above average temperatures. The lowest rainfall relative to average continues to be in Hidalgo and eastern Starr County, where less than 10 inches has fallen since the end of September, 2010. Year to date rainfall at Brownsville/South Padre Island Airport is 16.38 inches or 9.27 inches below normal. Harlingen/Valley International Airport has received 6.73 inches or 16.77 inches below normal. Year to date rainfall at McAllen/Miller Airport is 8.13 inches, or 12.54 inches below normal.

## Precipitation/Temperature Outlook

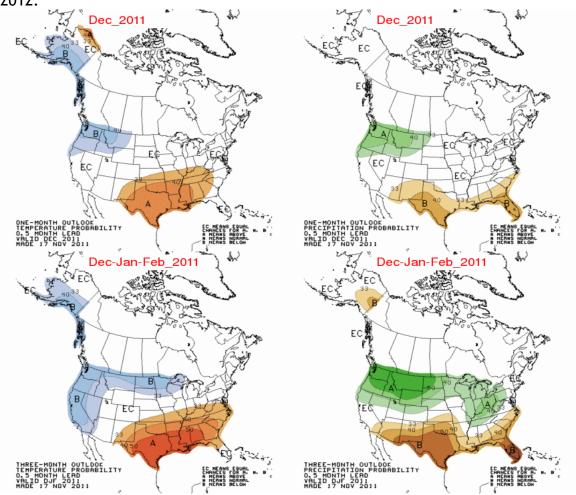
**Meteorological:** Through December 1st...Mid-level and surface ridging Will build over the Rio Grande Valley through early Thanksgiving week, and maintain very warm, windy, rather humid, but rain free conditions. A front will move through late on the  $22^{nd}$  or early on the  $23^{rd}$ , with perhaps some light rains before clearing and somewhat cooler weather returns into Thanksgiving Day. Southeast winds will return warm, breezy, and humid conditions to close the week before another front sweeps very dry, breezy to windy conditions into the region on November  $26^{th}$ , perhaps continuing into the  $27^{th}$ . A series of milder and drier air masses will move into the Valley from the  $28^{th}$  through December  $1^{st}$ , maintaining generally rain-free weather.



Any rainfall that does occur through December 1st will provide only very short term relief. All indications suggest continuing Extreme to Exceptional drought, or further increase in the Exceptional Drought area, by the end of the period.

The climatological high temperatures across the Rio Grande Valley/Deep South Texas region through the end of November normally range in the middle 70s. Typical overnight lows for this same period range from the lower 50s across the ranchlands and Rio Grande Plains, to the upper 50s across the Lower Valley. Temperatures are forecast to be much above average through November 22<sup>nd</sup>, a little above average through Thanksgiving Day and Black Friday, slightly below average for the 26<sup>th</sup> through 28<sup>th</sup>, then above average for the 29<sup>th</sup> through December 1<sup>st</sup>.

The long range climate outlook for The Rio Grande Valley/Deep South Texas region through February 2012 indicates that La Niña conditions will likely persist into early 2012. Any rainfall will provide only brief short term relief from the drought; there is a high confidence for further deterioration in drought conditions through the meteorological winter (December-February) 2012.



**Hydrologic:** Falcon and Amistad Reservoirs provide much of the water for the Rio Grande Valley. Lake levels at Falcon continue to show a steady decrease during the past several months. Storage at Falcon has fallen to 42 percent of normal conservation level; storage at Amistad has decreased to 85 percent of conservation.

#### Next issuance

This product will be updated around Thursday, December 1st 2011.

#### Related Web Sites

Climate Prediction Center
International Boundary and Water Commission
Texas Agrilife Extension Service
Texas Commission on Environmental Quality
Texas Interagency Coordination Center

#### Acknowledgements

The <u>Drought Monitor</u> is a multi-agency effort involving NOAA's National Weather Service and <u>National Climatic Data Center</u>, USDA, state and regional center climatologists, and the <u>National Drought Mitigation Center</u>. Information for this statement has been gathered from NWS and FAA observation sites, the USDA, Texas Agrilife Extension Service district agents, Texas Forest Service, state and federal wildlife departments, TCEQ, and IBWC.